

E<sup>3</sup>  
cancel'd.

includes a helical component which induces either a force as a result of changes in the flux linkage or changes in the flux linkage as a result of the relative linear movement.

E<sup>4</sup>

6. (Amended) The electromechanical transducer as claimed in claim 1, wherein the angle of the helical path of the plurality of coils is different to the angle of the plurality of magnetic poles of the magnetic assembly.

E<sup>5</sup>

11. (Amended) The electromechanical transducer as claimed in claim 1, wherein at least one of the stator, the magnetic assembly and the magnetic circuit member consists of a plurality of laminations stacked together and the planes of the individual laminations describe a helical path about the axis of the transducer.

Please add the following new claims 17-21:

E<sup>6</sup>  
cont.

17. An electromechanical transducer comprising:  
a stator having a plurality of coils;  
a magnetic field generator assembly having a plurality of magnetic poles there being flux linkage between the coils and the magnetic poles;  
the stator and the magnetic assembly arranged for relative linear movement; and

E6  
cont.  
both the plurality of coils and the plurality of magnetic poles arranged to describe a helical path about the axis of the transducer such that both helical paths have a common general angular orientation relative to the axis whereby the magnetic circuit includes a helical component.

18. The electromechanical transducer as claimed in claim 17, wherein the stator includes a plurality of core elements on which the plurality of coils are mounted and associated pole pieces.

19. The electromechanical transducer as claimed in claim 17, wherein the angle of the helical path of the plurality of coils is different to the angle of the plurality of magnetic poles of the magnetic field generator assembly.

20. The electromechanical transducer as claimed in claim 17, wherein holding means are additionally provided to constrain rotational relative movement between the magnetic assembly and the stator.

**Applicant:** Michael Dadd  
**Application No.:** 09/530,629

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21. The electromechanical transducer as claim in claim 17, wherein two transducers of opposite handedness are coupled thereby constraining rotational movement of the magnetic assemblies relative to the stator.

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### REMARKS

The Abstract has been amended in accordance with the Examiner's suggestions. Claims 1, 6 and 11 are amended. Claims 5 and 12 are canceled and their respective subject matter incorporated into claims 1 and 11, respectively. New claims 17-21 have been added along with text to the specification describing the common general angular orientation of the helical components as clearly illustrated in Figs. 4a-f. A marked-up version of the amendments to the claims and Abstract is attached. Claims 1-16 are pending in this application and all stand rejected. No new matter is introduced by this Reply.

Claims 1-2, 5 and 11-12 stand rejected as being anticipated by Griffiths et al. Claims 3-4 stand rejected as being unpatentable over Griffiths et al. in view of Schuster. Claims 6, 9 and 16 stand rejected as being unpatentable over Griffiths et al. in view of Kling. Claims 10 and 15 stand rejected as being unpatentable over Griffiths et al. in view of Beale et al. Claim 7-8 stand rejected as being unpatentable over Griffiths et al. in view of Davey. Claims 11-12 stand rejected as being unpatentable over Griffiths et al. in view of Pryjmak.